Executive summary (red boxes indicate links)

This report analyzes variation within the Medicare program and explores a variety of possible payment innovations. We study variation along several dimensions. On one of the most important dimensions—quality—we see some evidence that higher cost or service use does not necessarily result in better quality of care. Policymakers should give high priority to developing payment mechanisms that reward quality, and we see attractive opportunities to pursue.

Medicare program spending per beneficiary varies from state to state, hospital financial performance under Medicare varies from hospital to hospital, growth in volume of physician services varies by type of service, and availability and cost of supplemental insurance for beneficiaries vary by where they live and where they worked. Should these variations be a cause for concern? How much should be eliminated? How much is the inevitable result of providing complex services in local markets with different characteristics?

The first part of the report examines these different forms of variation and what they mean for the program, its beneficiaries, and its providers. We first look at variation in overall Medicare spending across the country and then at how insurance markets for products that supplement Medicare differ by state and smaller geographic areas. Next, we investigate aspects of variation within major provider settings. For hospitals, we analyze financial performance under the inpatient prospective payment system. For physicians, we explore the growth and use of various types of physician services. For post-acute care providers, we focus on beneficiaries' use of services and different types of providers, and compare use before and after implementation of prospective payment systems. We conclude our investigation of setting-specific variation by examining whether the differences in the costs of dialysis are related to quality of care.

While some of the variation we study in the first part of the report is caused by factors like health status, some differences remain and, at least on some measures, do not reflect differences in quality. A possible mechanism for addressing some of the undesirable variation in the program would be through innovations to payment, such as using financial incentives for quality and other payment structures that would promote quality care across settings. Improving the way the program pays for services could promote quality, and possibly reduce variation and spending.

Other innovations in payment include using market-based competition to purchase items and services in the fee-for-service Medicare program and improving the payment method for covered drugs, such as using private sector prices as a reference price and competitive pricing. By offering incentives to improve quality, using market forces to set payments for some services, and addressing the shortcomings in payments for Medicare-covered drugs, the program would make better use of scarce dollars. These innovations in payment would begin to establish a relationship between payment, quality, and efficiency.

Finally, the report includes two appendixes. One fulfills our statutory requirement to respond in our June report to the HHS Secretary's estimate of the payment update for physician services. The other is a new feature of our June report—an agenda for improving data on Medicare and health care. MedPAC wants to bring attention to this issue because it is central to payment and other policy decisions for the program.

Variation in per beneficiary Medicare expenditures

Large variation in local per beneficiary fee-for-service spending raises concerns about whether beneficiaries in low-expenditure areas are getting the care they need, and whether care is being efficiently provided in high-expenditure areas. Geographic

variation in per beneficiary spending has three sources: differences in the cost of providing care, in the special payments made for social objectives, and in the quantity of care provided. Chapter 1 finds that the cost of providing care, special payments to hospitals, and health status account for 40 percent of variation in Medicare per beneficiary spending among states. Once we adjust for these factors, the resulting measure—adjusted service use—varies much less across states than unadjusted expenditures do. Using some accepted measures of quality, we also find that higher service use in a state is not associated with higher-quality care.

Consistent with other research, our analysis finds that market-level factors, including the share of the population under age 65 without health insurance, the racial and ethnic mix of the 65 and over population, the supply of providers, and the availability of technology explain 35 percent of the variation remaining in the adjusted service use measure.

Implications of supplemental insurance market variation

We find variation not only in the Medicare program, but also in the availability of supplemental coverage. As we discuss in Chapter 2, 90 percent of Medicare beneficiaries obtain coverage in addition to the Medicare program's standard benefits through individually purchased Medigap policies, employer-sponsored retiree health benefits, assistance from Medicaid or other public programs, or enrollment in a Medicare+Choice option. Although the value and stability of options vary, this supplemental coverage is important to beneficiaries for a number of reasons, such as making health care spending more predictable and covering services Medicare does not. The options for supplementing Medicare actually available to beneficiaries vary considerably, however, because local markets differ, as do beneficiaries' resources, past employment histories, and preferences. We also find that the interaction of federal and state oversight of Medicare products influences the evolution of Medigap, employer-sponsored, and M+C options (as well as supplementation available through Medicaid), and thus are important to consider for incremental changes or broad reform proposals.

Sources of variation in hospital financial performance under prospective payment

Moving to the sector level with Chapter 3, we analyze variation in hospitals' financial performance under Medicare payment. Medicare designed its prospective payment system for inpatient acute care hospitals to capture differences in hospital costs due to patient complexity and geographic variation in input prices. The payment system also contains elements driven primarily by policy considerations, such as spending for medical education.

The payment system accounts for one-quarter of the variation across all facilities' Medicare inpatient margins. The system appears to be operating largely as expected. Most of the payment system's effects on hospitals' inpatient margins are attributable to deliberate policy adjustments that the Congress has added to the payment formulas, such as extra payments for teaching hospitals, those that serve a disproportionate share of low-income patients, and certain rural facilities. Inaccuracies in Medicare's case-mix and wage-index adjustments also make a small contribution to variation in margins. After taking into account the effects of the payment system, we do not find meaningful differences in margins associated with specific demographic or market characteristics. A substantial portion of the variation in Medicare inpatient margins is due to hospitals' operating characteristics (for example, length of stay), which are at least partially under management control. This finding is consistent with one of the fundamental assumptions of prospective payment: Managers can exert considerable control over hospital efficiency and the cost of care, and thus financial performance.

Growth and variation in the use of physician services

Chapter 4 picks up the theme of Chapter 1 by exploring the role of service use in determining Medicare expenditures, looking specifically at physician services. Medicare has pursued a number of strategies to address growth in the use (volume and intensity) of physician services, including expenditure targets. At issue is whether other policy options should be considered. Utilization grew at an annual rate of 3.3 percent from 1999 to 2002, and our analysis of the most recent data on Medicare beneficiaries' use of physician services finds that growth of service use is highest (an annual rate of 9 percent) for imaging services, such as magnetic resonance imaging and computed tomography. The data also show the widest geographic variation is in the use of tests and imaging services (a three-fold difference between maximum and minimum among the 50 largest metropolitan statistical areas).

Two major findings from the research literature bear on these conclusions. One, looking at the high degree of geographic differences in service use, concludes that much of the high use may be unnecessary and driven by practice patterns influenced by physician and hospital supply. The other finding from the research literature focuses on growth of use in services over time for specific procedures and concludes that technology diffusion that is often valuable to beneficiaries drives the growth. Further work is needed to understand the growth and variation in service use and, if necessary, to develop options for changing current policy.

Monitoring post-acute care

Chapter 5 shifts to another provider setting where changes in service use have concerned policymakers. In response to rapid growth and wide variation in the use of post-acute care, the Balanced Budget Act of 1997 and subsequent legislation mandated prospective payment systems for all post-acute care settings. This chapter presents research that monitors and assesses how these new payment systems have affected patterns of post-acute care.

Comparing patterns of use before and after the implementation of prospective payment for home health and skilled nursing facility (SNF) care, we find substantial declines in the use of home health care and increases in use of SNFs and other post-acute care providers. The steepest decline in posthospital home health care occurred among beneficiaries in states that previously had the highest use of these services and with diagnoses for which the need for home health care is hardest to define. Although home health care use dropped for beneficiaries of all ages, the declines were higher among younger beneficiaries.

We then turn to long-term care hospitals, which are unevenly distributed across the country, provide a small fraction of this type of care, and are very expensive post-acute settings. We find that patients who used these facilities are similar to those who used other settings and that SNFs and long-term hospitals are substitutes for their post-acute care. Further research is needed to see whether the patterns we see hold after we include more refined measures of illness severity. We also plan to analyze differences in patient severity, cost, and outcomes. Finally, we want to compare the type of care beneficiaries receive in areas with and without long-term care hospitals.

Quality of dialysis care and providers' costs

In Chapter 6 we look at dialysis, a service where the costs of providing a treatment vary substantially and where lower cost is associated with facility characteristics, such as type of ownership, location in rural and low-wage areas, and higher volume. The central question posed in this chapter is whether the lower costs per treatment result in lower-quality care for beneficiaries.

MedPAC's analysis shows that quality of care does not significantly differ between facilities with lower and higher costs for the bundle of services covered by the dialysis composite rate. When we add costs for drugs (not included in the bundle) and composite rate costs together, we find that beneficiaries' outcomes are poorer for facilities with higher than average costs. This finding may mean that certain facilities are less efficient at furnishing drugs than others and this inefficiency may in turn reflect less than optimal patient care. It is also possible that higher drug costs reflect unmeasured higher severity. Either of these explanations suggests the need to refine the outpatient dialysis payment system by broadening the payment bundle to include commonly used services currently excluded from it and accounting for differences in patient case mix. The finding that lower costs do not appear to compromise quality of care also will be useful to the Commission's discussion about the appropriateness of Medicare payments. This study also raises questions about ways that payment might be targeted to performance, a topic explored in greater depth in the following chapter.

Using incentives to improve quality in Medicare

One of Medicare's most important goals is to ensure that beneficiaries receive high-quality health care. Chapter 7 discusses the nonfinancial incentives and other tools Medicare already has for improving quality and innovative approaches used in the private sector. MedPAC strongly supports the work CMS has done in this area, which will improve quality and provide a base for future actions. Nonetheless, the current payment system generally fails to financially reward higher-quality plans or providers. Medicare's beneficiaries and the nation's taxpayers cannot afford for the Medicare payment system to remain neutral towards quality. Change is urgently needed. MedPAC recommends that Medicare pay providers differently based on quality and implement other payment structures to promote it across settings, where some of the most important quality problems occur. Two settings—Medicare+Choice plans and inpatient rehabilitation facilities—offer ready measures and standardized data collection, and we suggest that CMS start with these settings to create payment differentials. However, because other settings, such as hospitals and physicians' offices, affect a much larger number of beneficiaries, demonstrations or other steps should extend to those settings.

Improving beneficiaries' quality of care in the Medicare program is the primary goal of an incentives initiative. However, incentives for providers to improve care may have a secondary benefit of reducing geographic variation in service use, which physicians largely determine by deciding which test, procedure, or surgery is necessary for a given patient. While we know that the increased dollars spent on some of these services are not always associated with improved quality, we do not know which are unnecessary.

Financial incentives for quality could encourage greater use of best practices by first identifying the best way to treat patients and then rewarding providers that follow the guidelines, although such guidelines do not exist for all conditions. Where they do not exist, Medicare may be able to measure and reward outcomes—the ultimate indicators of quality. However, rewarding outcomes is complicated by case mix and other patient characteristics that independently affect outcomes.

By rewarding quality whether measured by guidelines or outcomes, the program would send the strong message that it cares about the value of care beneficiaries receive and encourages investment in quality.

Using market competition in fee-for-service Medicare

Chapter 8 addresses developing alternative payment mechanisms to control Medicare costs while assuring quality and access. This chapter considers how market competition could apply to the program by providing an overview of key design elements—product definition, competitive bidding process, and beneficiary protections—that any

competitive pricing approach must address. After introducing these elements, the chapter shows how two Medicare demonstrations approached market competition. MedPAC finds the results of the demonstration for durable medical equipment promising evidence that competitive pricing can result in cost savings without an adverse effect on quality or access. We recommend that the Congress authorize the Secretary to pursue more demonstrations of this nature and that it grant the Secretary broader authority to incorporate successful innovations into program operations, subject to advance review by the Congress.

MedPAC also finds that bundling services across settings, as with the participating heart bypass center demonstration, is worth exploring further in future demonstrations to control costs. Bundled services may also address the cross-setting quality problems that Chapter 7 describes.

Medicare payments for outpatient drugs under Part B

Chapter 9 looks in-depth at Medicare-covered outpatient drugs, for which the payment method is flawed and spending is growing rapidly at an estimated 35 percent between 2001 and 2002. We examine three major problems: Medicare payments far exceed provider acquisition costs; the system creates incentives for manufacturers to raise their list prices, resulting in increased Medicare payments; and drug administration fees do not reflect the true costs of providing drugs to beneficiaries.

Policymakers are considering how to change the current system. We describe payment methods that other public and private purchasers have developed for physician-administered drugs. We also analyze the alternatives suggested by the policy community, which include benchmarking methods, payment based on invoice prices, and competitive bidding. We discuss several benchmarking methods, including benchmarking payment amounts on transaction prices that could be audited. Combination approaches based on the competitiveness of the therapeutic drug class are also possible. While each method has advantages and disadvantages, any one of these alternatives would be a significant improvement over the current payment system. ■